

A4  
concl.

**IN THE CLAIMS:**

~~-5.~~

one or more communication interfaces, connected to said processor, and further connected to a plurality of pieces of customer premises equipment located at the telephone customer premises;

AS  
Cont.

facilitate communication from a first one of said plurality of pieces of customer premises equipment to a second one of said plurality of pieces of customer premises equipment;

413317-1

equipment; and

redirect incoming data traffic in accordance with said use status.

6. The communications device of claim 5, where said plurality of pieces of customer premises equipment includes a telephone.

7. The communications device of claim 6, where said plurality of pieces of customer premises equipment further includes a television set-top box.

8. The communications device of claim 6, where said plurality of pieces of customer premises equipment further includes a videophone.

9. The communications device of claim 6, where said plurality of pieces of customer premises equipment further includes a personal computer.

10. The communications device of claim 5, further comprising:  
a radio frequency interface, communicatively connected to said processor; and  
an integrated digital services network interface, communicatively connected to said processor.

11. The communications device of claim 5, further comprising a cordless telephone interface, communicatively connected to said processor and a cordless telephone.

AS  
C2  
102260-092701

12. The communications device of claim 5, further comprising an analog telephone connected to said digital subscriber line modem by a lifeline connection, whereby analog telephone service may continue to be provided in the event of a power failure at the telephone customer premises.

13. The communications device of claim 5, further comprising:  
a residential interface located at said telephone customer premises and connected to said processor; and

a plurality of analog telephones connected to said residential interface, wherein said processor is configured to create a plurality of virtual telephone lines to allow said plurality of analog telephones to simultaneously communicate using the twisted-pair wire connection.

14. The communications device of claim 5, further comprising a protector block between said digital subscriber line modem and said twisted-pair telephone connection.

15. A telephone service method, comprising the steps of:  
receiving incoming data for first and second pieces of customer premises equipment in a single multiplexed signal from a telephone switch over a telephone connection;  
demultiplexing said signal;  
converting a first portion of said incoming data to a communications protocol of said first piece of customer premises equipment;  
transmitting said first portion of said incoming data to said first piece of customer premises equipment; and

AS  
Cont  
09963655-092701  
T02250"559E9660

0966365609201  
AG  
Cot

transmitting said single outgoing signal to said telephone switch.

delivering to said first piece of customer premises equipment the selectively filtered portion of said multicast signal.

monitoring a use status of a third piece of customer premises equipment; and

transmitting said first portion of said incoming data to said third piece of customer premises equipment when said first piece of customer premises equipment is in use and said third piece of customer premises equipment is not in use.

19. The communications device of claim 5, wherein said processor is further configured to:

receive an incoming signal on said twisted-pair wire connection, wherein said incoming signal contains multiplexed digital data intended for two or more of said plurality of pieces of customer premises equipment;

demultiplex said incoming signal; and

transmit demultiplexed portions of said incoming signal to said two or more of said plurality of pieces of customer premises equipment.

20. The communications device of claim 5, wherein said processor is further configured to

dynamically allocate an available bandwidth of said digital subscriber loop modem according to said use status.

21. The method of claim 15, wherein said single multiplexed signal is a digital signal, and wherein said first and second portions of said incoming data are digital signals.

22. The device of claim 5, wherein said one or more communication interfaces includes a fire wire interface carrying a plurality of video signals for a plurality of video devices.

AS  
CONFIDENTIAL  
10/26/00

23. A communications device disposed at a telephone customer premises, comprising:

a processor;

a digital subscriber line modem, connected to said processor, and further connected to a telephone network central office by a twisted-pair wire connection;

one or more communication interfaces, connected to said processor, and further connected to a plurality of pieces of customer premises equipment located at the telephone customer premises;

a residential interface located at said telephone customer premises and connected to said processor; and

a plurality of analog telephones connected to said residential interface, wherein said processor is configured to create a plurality of virtual telephone lines to allow said plurality of analog telephones to simultaneously communicate using the twisted-pair wire connection; and

wherein said processor is further configured to:

multiplex outgoing digital data from said plurality of pieces of customer premises equipment for transmission on said twisted-pair wire connection by said digital subscriber line modem in a digital portion of a frequency spectrum of said digital subscriber line modem; and

facilitate communication from a first one of said plurality of pieces of customer premises equipment to a second one of said plurality of pieces of customer premises equipment.

24. The communications device of claim 6, where said plurality of customer premises

equipment includes an analog telephone.

25. The communications device of claim 6, where said plurality of customer premises equipment includes a cordless telephone.

26. The communications device of claim 5, where one of said communication interfaces is an Ethernet interface.

27. The communications device of claim 5, where one of said communication interfaces is an ISDN interface.

28. The communications device of claim 5, where said outgoing digital data is in a packetized form having an address.

29. The method of claim 5, where said incoming data is in a packetized form having an address.

30. The method of claim 15, where said step of transmitting a second portion of said incoming data further includes the step of using an Ethernet interface.

31. The method of claim 15, where said step of transmitting a second portion of said incoming data further includes the step of using an ISDN interface.--